



**VR-ACF
FLUSHER–CLEANER–RECYCLER
OPERATING INSTRUCTIONS**

READ ALL INSTRUCTIONS BEFORE OPERATING FLUSHER

USE ONLY DRY SHOP AIR WITH THIS FLUSHER. ALTHOUGH THE FLUSHER IS EQUIPPED WITH AN AIR FILTER, CAUTION MUST STILL BE USED TO AVOID EXCESSIVE CONTAMINATION OF THE A/C SYSTEM WITH MOISTURE FROM THE SHOP AIR SUPPLY.

Place the drain valve and control valve in the closed or OFF position. Remove the filler cap at the back of the machine and install approximately 2 gallons of an approved solvent (VIPER part # 098-317-100 or HECAT Safe-Flush recommended). Other solvents will work with this unit, however foaming type solvents are not to be used as they will contaminate the flusher and stop the pulsing action. If the flushing fluids containing CF 20 or 141 are used they will dry out the seals in the control valve and are cost prohibitive due to the fact that they evaporate too rapidly and will not recycle well. Fill the flush tank only to the full mark (slot behind the sight glass) at the sight glass on back of flusher. **DO NOT OVERFILL! OVERFILLING WILL NOT ALLOW FOR A HEADSPACE ABOVE THE SOLVENT IN THE FLUSH TANK.**

With the control valve in the OFF position and before connecting shop air to the flusher, drain the air filter. Connect the shop air supply to the air filter.

Using the flushing adapter kit (Viper part # 134-317-000) supplied with the flusher and the required A/C system adapters, connect the flusher hoses to the A/C system as outlined in the following instructions.

The following sequence of flushing and purging operations is recommended. This is to assure that the remaining solvent is purged from the lowest part of the A/C component being flushed at the end of the purging cycle.

When flushing a condenser and/or high pressure liquid lines, connect the rubber (discharge) hose to the outlet side of the component first, then the braided vinyl (inlet) hose to the inlet side. Perform the flushing operation, as will be outlined later, then reverse the hoses at the quick couplers and complete the final flushing and purging of the component from the inlet through the outlet side. The outlet side of the condenser is the lowest side.

When flushing an evaporator, the procedure is just the reverse, as the lowest side of an evaporator is the inlet side. This would mean that the final flush and purge would be made from the outlet side of the component, through the component and out the inlet side.

The sequencing in this manner will assure the maximum efficiency of the flushing equipment.

After the flusher is connected to the A/C component as outlined, turn the control valve to the FLUSH position for 20 to 30 seconds. This will allow 20 to 30 ounces of fluid to flow through the system. Turn the control valve to the OFF position for about 10 seconds to allow a bleed-off of the residual pressure. Reverse the hoses as instructed previously and repeat the flushing operation in a backflushing mode. Move the control valve to the PURGE position and allow the system to purge for 10 to 15 minutes. Some solvent manufacturers may recommend a longer period of purging, depending on how readily their solvent will vaporize. Repeat the operation for the remaining component and then return the control lever to the OFF position. This completes the flushing operation.

Should the tank be emptied during the flushing operation, it will not be necessary to change the position of the hoses to recycle the solvent. The control valve may be moved to the RECYCLE position at any time and the solvent will be moved through the particle and dryer filters and returned to the flush tank.

Flushing must be followed by a thorough job of evacuating with a good vacuum pump to assure removal of moisture from the A/C system.

The technician should use good judgement as to how frequently to drain the flusher, install a new particle filter and/or install new solvent. Flushing of several extremely dirty A/C systems in succession will contaminate the solvent much more rapidly and decrease the number of systems that can be flushed before changing the solvent.

When draining or changing the solvent becomes necessary, please observe the following procedure. With the shop air supply connected to the flusher, connect both hoses to each side of the anti-evaporation nipple on the back of the machine. Turn the control valve to the RECYCLE position, and allow all the solvent to flow into the FLUSH tank. Remove the drain hose from its retaining clip and place the open end of the hose in a suitable drain container. Place the control valve in the PURGE position and open the drain valve SLOWLY to avoid solvent being blown from the hose too rapidly. Allow solvent to flow from the drain hose until nothing but air comes from the hose. Return the control valve to the OFF position, close the drain valve, and disconnect the shop air before attempting to remove the filler cap.

The flusher is equipped with a non-bypass, spin-on particle filter and a filter dryer to clean the solvent during the recycling operation. The spin-on filter is a Purolator (part # P20064 or equivalent) and may need to be changed when the solvent is changed, depending on the severity of the contamination of the A/C systems that have been flushed.

Should the recycling operation become too slow, it may be necessary to replace the filter dryer. This dryer is a standard # 163 commercial dryer with 3/8" flare fittings. These dryers are generally available from any commercial refrigeration supply store.

The vent filter has an activated charcoal element to control solvent emissions which is replaceable separately as needed.